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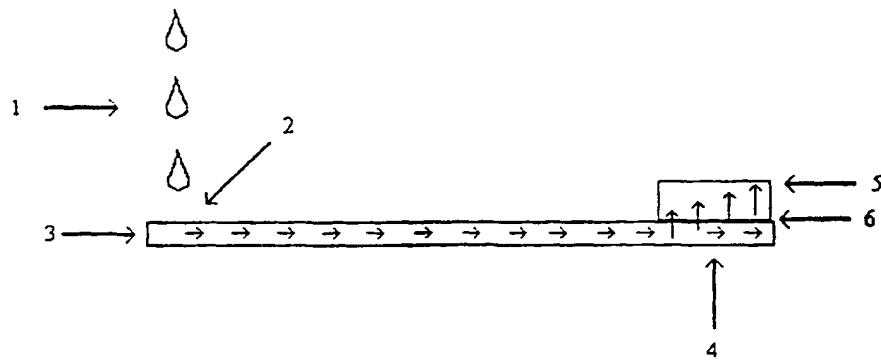
- (51) International Patent Classification⁷: G01N 33/52 (72) Inventor: SMITH, Jack, V.; 100 Rutledge, Arden, NC 28704 (US).
- (21) International Application Number: PCT/US00/09332 (74) Agents: RUSZALA, Lois, K.; Dade Behring Inc., 1717 Deerfield Road, Deerfield, IL 60015 et al. (US).
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09/545,681 7 April 2000 (07.04.2000) US

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR DETECTION OF ANALYTES IN URINE USING LATERAL FLOW HYBRID DEVICE

WO 00/62060 A3



(57) Abstract: This invention is in the field of toxicology and clinical chemistry. The invention relates to dry chemistry test devices which can be used in Point of Care testing in the detection of analytes, including analytes pertaining to adulteration of urine samples submitted for drugs of abuse testing as well as analytes for clinical chemistry parameters. The test device prevents cross contamination and increases accuracy and precision.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/09332

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N33/52

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>KLING E J: "Performance of AdultaCheck 4 test strips for the Detection of Adulteration at the Point of Collection of Urine Specimens Used for Drugs-of-Abuse Testing" JOURNAL OF ANALYTICAL TOXICOLOGY, vol. 23, no. 1, January 1999 (1999-01) - February 1999 (1999-02), page 72 XP002159962 the whole document</p> <p>---</p>	1,3,4,6
A	<p>Drugs of Abuse Testing Division, AdultaCheck-TM 4 kit description at http://www.onsite-dat.com/flash/train_adulta.html XP002159963 the whole document</p> <p>---</p> <p>---</p> <p>-/-</p>	1-6

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

9 February 2001

Date of mailing of the international search report

05.03.01

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/09332

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 752 448 A (WELLS HENRY J ET AL) 21 June 1988 (1988-06-21) the whole document -----	

INTERNATIONAL SEARCH REPORT

national application No.
PCT/US 00/09332

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-6

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1 - 6

A method for the detection of glutaraldehyde in a body fluid by using a dry chemistry test means

2. Claims: 7 - 14

A method for the detection of an analyte in a body fluid by using a dry chemistry means which is disposed proximate to lateral flow means; device comprising such lateral flow means.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/09332

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 4752448	A 21-06-1988	AU 7542087 A		15-07-1987
		BR 8607049 A		23-02-1988
		DK 427687 A		17-08-1987
		EP 0229517 A		22-07-1987
		FI 873547 A		17-08-1987
		HU 53460 A		28-10-1990
		NO 873442 A		14-08-1987
		WO 8703961 A		02-07-1987
		ZA 8609517 A		30-09-1987